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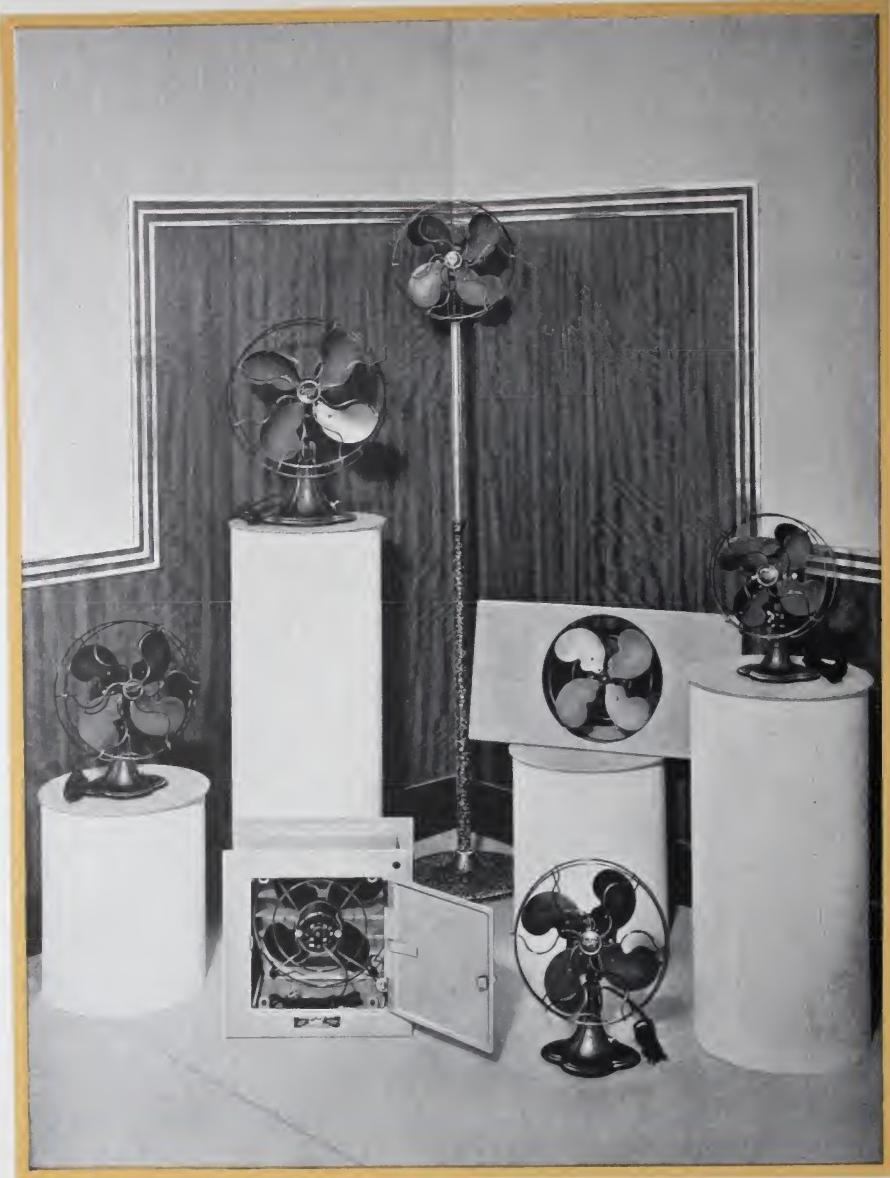
MAR 23 1937

EMERSON FANS

for 1937



EMERSON EMERSON ELECTRIC MANUFACTURING COMPANY
MOTORS - FANS - APPLIANCES
PHILADELPHIA



EMERSON-*Seabreeze* Fans

REG. U. S. PAT. OFF.

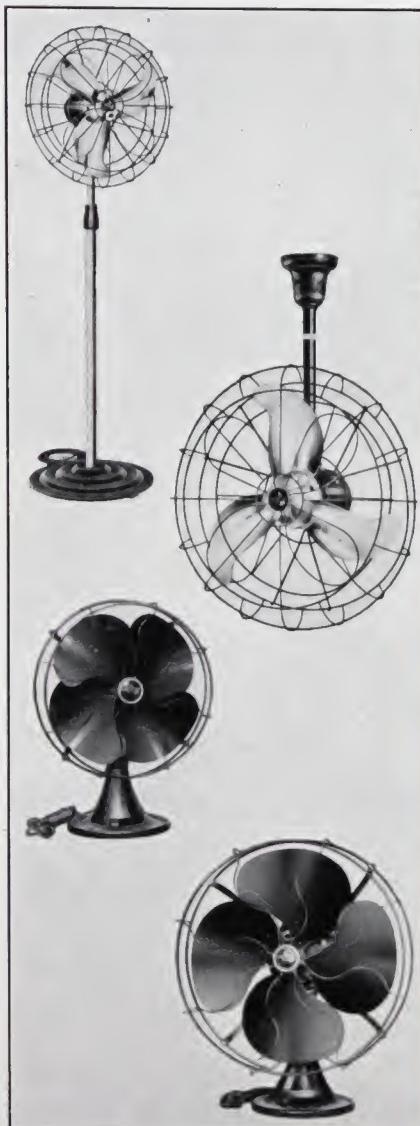
... for 1937, the most popular of all popular price fans are presented in a complete range of sizes and prices. A new 12-inch oscillator, at the lowest price ever offered by Emerson Electric on a fan of this size, and a new 10-inch oscillator on a beautifully finished adjustable floor stand will earn extra profit for fan retailers.

The Complete Line Consists of:

Type 3140-B	8-inch non-oscillator	List Price \$3.50
Type 3150	10-inch non-oscillator	List Price 6.50
Type 3250	10-inch oscillator	List Price 9.00
Type 3250-AB	10-inch oscillator on adjustable floor stand	List Price 14.00
Type 3460	12-inch oscillator	List Price 17.50
Type 3350	10-inch ventilator with adjustable metal panel	List Price 7.50
Type 3350-AB	10-inch ventilator with adjustable wall box	List Price 24.00

Complete information on Emerson-Seabreeze Fans is contained in a separate catalog which will be sent on request. Emerson Fan Discounts do not apply to these List Prices—See separate Emerson-Seabreeze Discount Sheet.

NEW EMERSON ELECTRIC FANS



New fans, improved fans, important new features, introduced for the first time. Read through every page of this catalog. Now, more than ever before, Emerson Electric offers the "Most Complete Line of Quality Fans in America."

Illustrated on this page are the new fans for 1937, and you will find complete information on these types on the pages listed:

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Use this catalog in planning for summer sales and profits. There is an Emerson Electric Fan for every purse and purpose.

Tie-in your own fan merchandising with the powerful Emerson National Magazine Advertising. A liberal supply of Emerson Retailer Sales Helps will be furnished without charge.

Order your assortment of Emerson Electric fans and Sales Helps from your nearest Emerson Wholesaler now.

EMERSON EMERSON ELECTRIC **ELECTRIC**

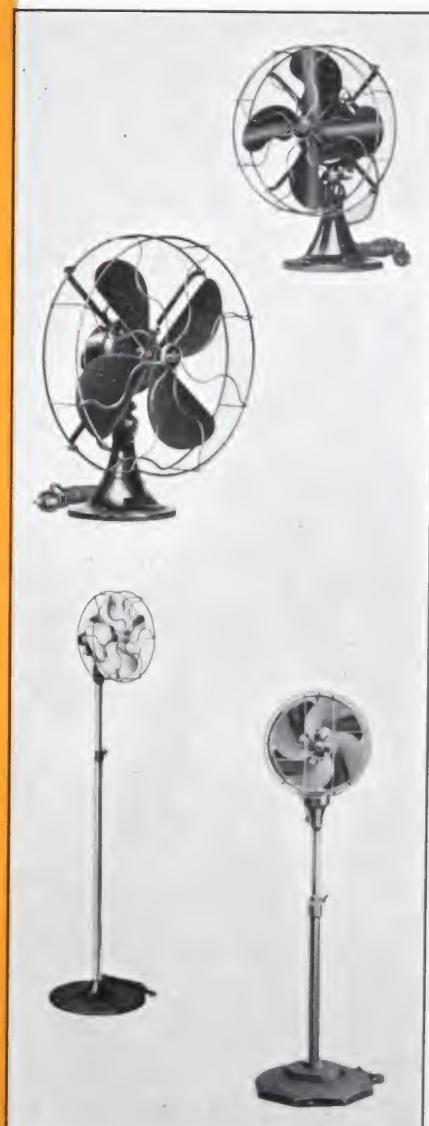
MOTORS - FANS - APPLIANCES
ST. LOUIS Chicago Detroit New York

EMERSON FAN CATALOG

UNIT No. X-1949 (Replacing X-1149)

Index: B580:A120.0(F)

FOR 1937



New! EMERSON 12 and 16-inch Fans-Capacitor Motors

Cross-section View of New EMERSON Type 73646-AK, 12-inch Oscillating Fan, Showing the Many Exclusive and Extremely Fine Details of Emerson Perfected Design.



No. 1. Carrying handle.

No. 2. Only one oil well. Note extra length. Holds additional oil, usually sufficient for a full season's operation. Leads oil direct to reservoir in hollow shaft.

No. 3. Gear case sealed against motor cover to prevent leakage of lubricant. (Supply of oil in gear case will normally last the life of the fan.)

No. 4. Floating worm shaft drives the oscillating gears. (Also see No. 4 in phantom view above showing assembly of gears.)

No. 5. Spur gear shaft has return oil groove to provide continuous lubrication of shaft and prevent oil leakage from gear case.

No. 6. Finger-tip oscillating adjusting case. Simply turn the rim of the adjusting case to the desired range of oscillation, from 90° down to stationary position. Solid bronze connecting link between base and oscillating adjusting case. (Also see No. 6 in phantom view above.)

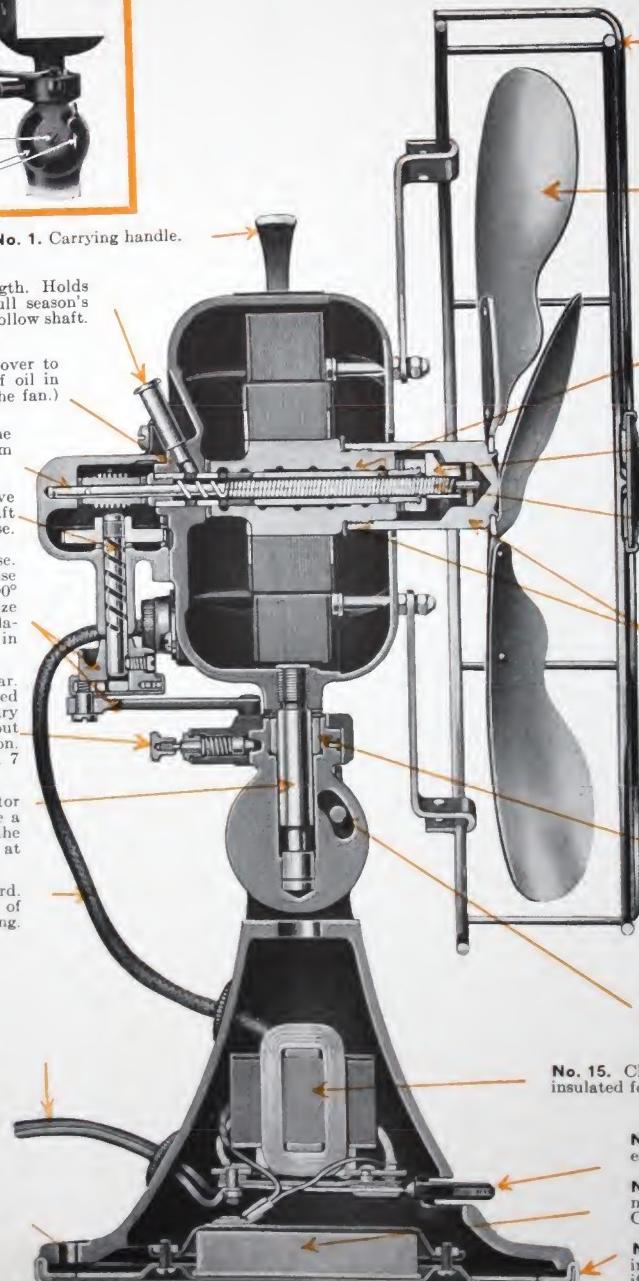
No. 7. Latch handle on adjusting collar. Five positions permitting fan to be used within an arc of 180° when in a stationary or wall bracket position. Merely pull out the handle and turn fan to desired position. Handle locks in position. (Also see No. 7 on phantom view above.)

No. 8. Base stud is screwed into the motor casting and the top coined over to make a permanent connection. The recess in the stud receives the pivot screw shown at No. 8 in the phantom view above.

No. 9. Special tinsel oscillating cord. Endurance tests have shown in excess of 200,000,000 oscillations without breaking.

No. 10. Durable rubber covered extension cord with one-piece rubber plug. Approved by Underwriters.

No. 11. Three drilled holes in base casting for wall mounting.



No. 23. Double-ring, spot welded guard securely mounted with steel arms to the motor cover.

No. 22. Blades securely riveted to the flange. Each set is accurately balanced to give smooth operation. Parker Blades are made of steel, Parkerized and finished in durable Lacquer. Overlapping Blades are made of aluminum and specially treated to prevent corrosion and then finished in durable Lacquer.

No. 21. Oil slots in the shaft and spiral oil grooves in the rotor core keep the oil flowing continuously while the fan is in operation.

No. 20. Wiper keeps the lubricant in the front oil reservoir circulating down to the return wire coil conveyor.

No. 19. Force-feed oil circulating system. Oil is carried to the back reservoir of the shaft by a spiral wire coil conveyor which rotates on the floating worm shaft, operating in the stationary hollow steel rotor shaft.

No. 18. Steel fan hub, to which fan blades are attached, is screwed on the hub of the rotor against a special sealing gasket. Absolutely prevents the leakage of oil from the motor.

No. 17. Bearing made of special, porous composition bronze, impregnated with oil assures freedom of oscillating motion for life of the fan, without need for relubrication.

No. 16. Clamping screw. Loosen to tilt fan up or down or remove and insert in other slot (shown by No. 16 on phantom view above) for wall bracket mounting.

No. 15. Choke coil used for speed regulation. Heavily insulated for long service.

No. 14. Lever-type insulated switch gives easy speed regulation.

No. 13. Specially built condenser—rigidly mounted—a new feature of Emerson Fan Construction. Will normally outlast the fan.

No. 12. Felt covering for base, prevents injury to polished surfaces. Easily replaced if damaged or worn.

from letters, written by their owners, testifying to their remarkable service records, are shown on several pages of this catalog.

The above illustration is a cross-section view of Type 73646-AK, 12-inch, Parker Blade Oscillator. The mechanical details of its companion 16-inch oscillator, Type 73648-AK, and the 12-inch and 16-inch Overlapping Blade Oscillators (Types 77646-AK and 77648-AK) are identical.

A full understanding of the refinements in Emerson design and construction is necessary to appreciate the reputation Emerson Electric enjoys as the manufacturer of "Long Life Fans."

A number of these important features have been basic in Emerson Fan construction for over a quarter of a century—proving their worth in actual service.

Pictures, of Emerson Fans made many years ago, and excerpts

Special Features that Make EMERSON the Long Life Fans

Exclusive, Emerson Bearing Design—Force-feed Lubrication System—Finger-tip Oscillation Control—Latch Handle for Centering Breeze—Durable Finish.



By showing the assembly of armature and blade on Emerson Standard 12 and 16-inch fans, you can give a practical demonstration of the extremely fine construction and simplicity of design.

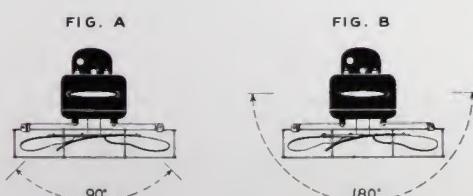
The armature rotates on a stationary $\frac{1}{2}$ -inch diameter, case hardened, hollow steel shaft pressed into the motor frame. The armature core is porous cast iron, and this cast iron core and case hardened steel shaft make an ideal combination of bearing materials. The cast iron core absorbs oil and the bearing surfaces of both core and shaft acquire a fine glazed appearance like plated metal, which makes practically an everlasting bearing. Each armature core is hand reamed to fit the hollow shaft with which it is used.

This unique oil-tight, dust-proof bearing has been an exclusive feature on Emerson fans for over 30 years.

Force-Feed Lubrication

The lubricant in the fan hub is carried through the hollow shaft by the coil spring attached to the floating worm shaft. When the lubricant reaches the back end of the shaft, it is forced out through the slots in the hollow shaft to the bearing surfaces. The rotor core surface has a spiral groove which carries the lubricant forward, lubricating the entire length of the shaft as it travels to the fan hub. When additional lubricant is added through the oil well, it flows down through the hollow shaft to be picked up and put in circulation the same as the original lubricant.

Finger-Tip Oscillation Control



For ease of control—simplicity of adjustment and smooth operation, the exclusive Emerson oscillation adjustment is one of the outstanding achievements in the Emerson design. Now, finger-tip oscillation adjustment is made available on all Emerson oscillators, from the small 8-inch to the large 16-inch fans. Adjustment from non-oscillating position to any range of oscillation, up to 90° , is obtained by simply turning the rim of the oscillating adjusting case.

The exclusive "patented" adjusting collar on Emerson 12-inch and 16-inch fans is another important feature—shown directly below oscillating link in illustration at right. The breeze can be directed to any desired point, in a wide arc, without moving the base, and without the use of tools. This is particularly advantageous when the fan is mounted on the wall.

Figure A, above, illustrates the 90° maximum oscillation arc, and Figure B the complete range of oscillation possible, giving a total of 180° , from a fixed position through the five stops in the adjusting collar.



Famous EMERSON Salt Water Test

Emerson Fan Subjected to Severe Service to Test Finish and Performance.

Emerson Electric fans are well known for their sturdy construction and ability to operate for long periods under adverse conditions, but when subjected to extreme abuse, such as was the case in this test, their stamina is demonstrated more forcibly than is possible under normal service conditions.

The purpose of the test was to determine the operating characteristics of the Emerson Fan in a salt atmosphere such as exists along the seacoast and aboard ship. An unusual method was employed to accelerate the testing period.

A regular stock Emerson 12-inch fan, Type 29646, was used for the test. The guard, base and gear case were removed. The fan motor was fastened to a block and installed in an enclosed glass case. To obtain the humid conditions which sometimes prevail at sea, and in seacoast cities, an electric heating element was installed in the case. Nine hours each work day and four hours on Saturday the fan was operated in a temperature of 114° F. with a spray consisting of a solution of 10% sea salt directed at the fan blade and motor. This created a heavy fog inside the case. During the remaining hours of the day and night, the fan was maintained in operation in a temperature of 104° F. without the salt spray, but in the salt atmosphere.



20,772 Hours in Operation

The motor was operated a total of 7,169 hours in the salt spray with the temperature at 114° F. and 13,603 hours in a salt atmosphere in a temperature of 104° F., a combined total of 20,772 hours or equivalent to 865 days, without any sign of motor failure.



As would be expected, the salt water penetrated into every recess of the motor windings, but it failed to injure the insulation or windings, as no short circuits developed.

It is believed that this test is one of the most severe that a fan motor has ever undergone, and while no known actual service could even approximate the severity of the conditions imposed upon this motor, it gives a good idea of how little effect extreme climates have on the satisfactory operation of Emerson Fans.

Finish Not Affected by Salt

The blades were washed and cleaned occasionally to note the effect on the finish and at these times additional lubricant was placed in the fan hub, the only attention given the operating parts.

The two photos, shown on right, and directly above, were taken after the salt deposit was washed off the blades, with practically no injurious effect on the Parkerized steel blades or the two-coat lacquer finish. Note the back cover of the motor above, as it appeared when the test started and as it appeared with its heavy deposit of salt. Also notice that all the ventilating holes became sealed, in fact, the only ventilation the motor obtained was around the fan blade hub. In some places the salt coating has fallen off due to its own weight.



EMERSON Chromium Finish Fans...

These Fans Are Coming into Wider Use Every Year. The Sparkling Chromium Finish Adds a Touch of Beauty and Refinement to the Most Elaborate Furnishings.



Type S60WA Air Circulator on Adjustable Floor Column Mounting
One-Year Guarantee

Emerson Chromium finished fans are ideal for finely furnished stores, club-rooms, restaurants, theatres, and similar public places.

Emerson oscillators are available in three sizes for alternating current and two sizes for direct current. Detail specifications and complete performance information are given on pages 10, 11, 12 and 13.

Emerson Air Circulators and Accessories are also available from stock, in five types and four styles of mountings. The gleaming, polished aluminum blades and chromium-plated motor covers blend beautifully with the satin-finish, chromium-plated guard and aluminum lacquer finish on the motor field ring. For Air Circulator specifications and performance information turn to pages 14 and 15.

Finish Specifications Only

DESK FANS

FINISH—Polished chromium plate over all parts.

AIR CIRCULATORS

MOTOR FINISH:

Field ring and mounting yoke attachment finished in aluminum lacquer. Front end cover and back enclosing shell polished chromium plate.

BLADE FINISH:

Type S60WC—polished chromium plate, other types highly polished aluminum.

GUARD FINISH:

Satin-finish chromium plate.

Air Circulator Mounting Accessories

CEILING MOUNTING FITTINGS:

Motor-socket and ceiling shell finished in polished chromium plate. (No hanger pipe regularly furnished. See note at bottom of page for list price.)

FLOOR COLUMN MOUNTING:

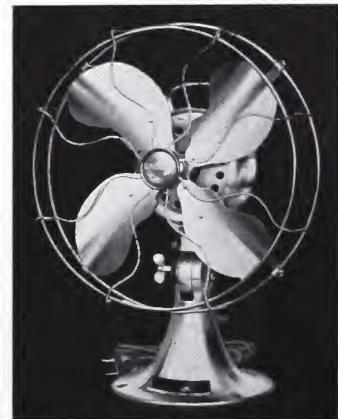
Base finished in black wrinkle, coupling in baked black japan, column and motor-socket in polished chromium plate.

COUNTER COLUMN MOUNTING:

Column, base and motor-socket finished in polished chromium plate.

WALL BRACKET MOUNTING:

Bracket, stud and motor-socket finished in polished chromium plate.



Type 73646-AK 12-inch Oscillator
5-Year Guarantee

SIZE	NO. BLADES	VOLTS	CURRENT	SPEEDS	PERFORMANCE	WEIGHT		TYPE No.	CODE WORD	LIST PRICE EACH
						NET	PKD.			
10"	4	110	60 cy.	1 sp. osc.		11	16	2250-B	SEDUN	\$18.95
12"	4	110	60 cy.	3 sp. osc.		21	31	73646-AK	SARAK	33.50
16"	4	110	60 cy.	3 sp. osc.		23	38	73648-AK	SARON	40.50
12"	4	115	D. C.	3 sp. osc.		23	38	75046	TIPON	37.00
16"	4	115	D. C.	3 sp. osc.		25	42	75048	TIVOT	43.50
24"	4	110	60 cy.	1 sp.	For complete performance information on these fans see pages 10, 13 and 14.	36	59	S60WC	KOCOP	48.75
24"	3	110	60 cy.	2 sp.		37	60	S60WA	KLANT	55.25
30"	3	110	60 cy.	2 sp.		41	62	S60WB	KHOTM	67.75
24"	3	115	D. C.	1 sp.		38	61	D60TL	TESOF	63.75
30"	3	115	D. C.	1 sp.		42	63	D60TM	TESAB	76.25
Ceiling Mounting Fittings for Air Circulator (no hanger pipe).....						5	7	.....	KNIPS	3.75
Adjustable Floor Column Mounting for Air Circulator, Min. 4'11", Max. 8'4".....						58	74	.....	KOGAP	19.00
Counter Column Mounting for Air Circulator, 1'8" base to center of fan.....						33	41	.....	KNOLP	13.50
Wall Bracket Mounting for Air Circulator, 1'2" extension from wall.....						15	25	.....	KLEMT	12.00

Air Circulator prices apply to fans only, without mounting fittings.
Chromium plated hanger pipe for ceiling mounting of Air Circulator can be furnished at \$.75 List per foot or fraction thereof.

Regularly carried in stock at St. Louis, New York, Chicago.
All data subject to change.



EMERSON
5-Year
Factory-to-User
Guarantee

EMERSON

Silver Swan

Fans...10 and 12-inch Sizes

*Introducing the New, Beautiful
12-inch Silver Swan Oscillator
on Adjustable Floor Stand*

Type 5460-AA
12" Silver Swan Oscillator
on Adjustable Floor Stand

SIZE	STYLE	VOLTS	CURRENT	SPEEDS AND WATTS		*AIR DELIVERY	WEIGHT		TYPE No.	CODE WORD	LIST PRICE EACH	
				1550 rpm 45 watts	1-speed only		NET	PKD.				
10"	Osc.	110	60 cy.	1550 rpm 45 watts	1-speed only	650 CFM	12	18	5250-B	SOHEP	\$17.50	
10"	Osc.	110	60 cy.	1550 rpm 45 watts	1-speed only ("Imperial Model")	650 CFM	13	19	7250	SEGEM	19.75	
12"	Osc.	110	60 cy.	1500 rpm 47 watts	1100 rpm 38 watts	900 rpm 33 watts	1100 CFM	21	31	5460	SEDEK	32.50
12"	Osc. with adj. floor stand	110	60 cy.	1500 rpm 47 watts	1100 rpm 38 watts	900 rpm 33 watts	1100 CFM	42	54	5460-AA	SOGEN	38.95

* CFM—Cubic feet of air per minute—high speed.
Regularly carried in stock at St. Louis, New York, Chicago and by
conveniently located wholesalers.
Fans will operate satisfactorily on voltage 10% above or below rated
voltage. (Silver Swan fans not furnished for 50-cycle current.)

Performance data subject to variation of 10% plus or minus (all data
subject to change).
All fans packed one in a box. (Type 5460-AA packed in one carton
unassembled.)

EMERSON 10 and 12-inch Silver Swans

The New 12-inch Silver Swan Oscillator on Adjustable Floor Stand Completes the Line of "Most Beautiful Fans in America." Gives the Line Added Sales Appeal.

The rapidly increasing demand for these smart fans has fully justified advance predictions that the better homes, commercial shops and offices of America want fans of modern design.

In creating these new fans, many difficult engineering problems had to be met. Practical design, operating efficiency and striking appearance were combined, without sacrificing any one of the three fundamentals.

Emerson Silver Swan Fans carry the same liberal 5-year factory-to-user guarantee as the other conventional types, definite proof that the practical, sturdy construction of the motor and other parts will give many years of service beyond the guar-

antee period. A comparison of the air moving capacity of the beautifully formed blades and the operating efficiency of the motor, with conventional type fans, will demonstrate why Emerson Silver Swan fans have found such ready sale.

Silver Swan beauty is more than "skin deep." Every detail has received the attention of skilled designers and the harmonious finish combinations can be fitted perfectly into the most elaborately furnished surroundings. See the "Finish Specifications" below.

A complete assortment on display will stimulate the desire of fan buyers to own Silver Swans.

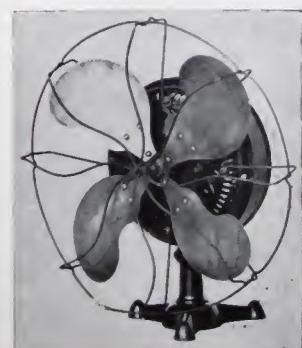
Detail Specifications

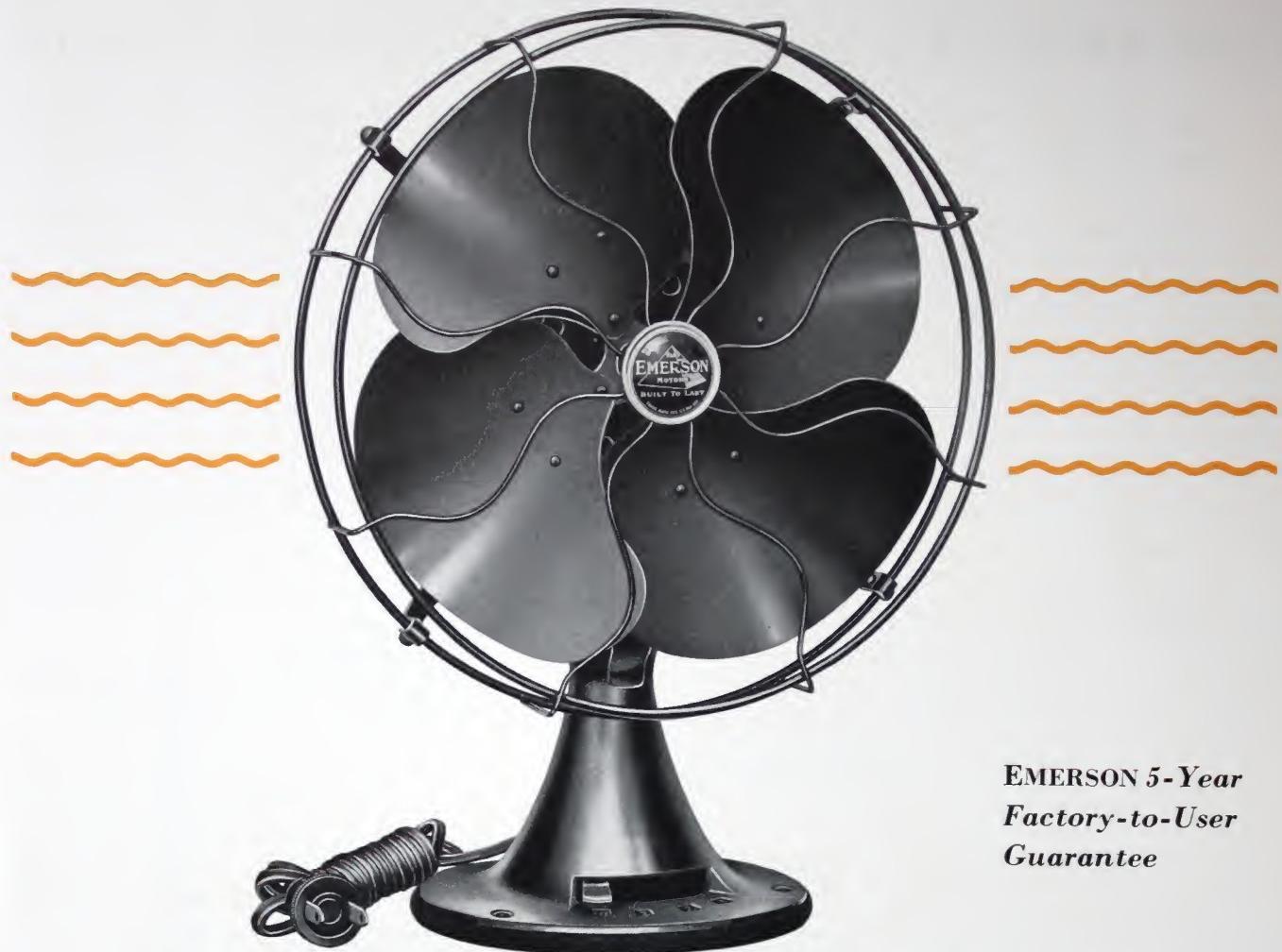
MOTOR:	Induction type, enclosed by two formed aluminum enclosing covers of streamline design to facilitate air movement. No brushes or mechanical starting device—no radio interference. 12" fans have capacitor type motors.
SHAFT:	Solid steel shaft 5/16" in diameter accurately ground to size.
BEARINGS:	Large bronze bearings—grooved to distribute oil evenly.
LUBRICATION:	Oil-fed by cotton wicking from both upper and lower reservoirs.
SWITCH:	10-inch Desk Fans—Single-speed toggle switch in base. 12-inch Desk Fan—Special type three-speed switch in base. 12-inch Fan on Stand—Three-speed sliding switch in base.
BLADES:	Four blades, designed for maximum air delivery and extreme quietness of operation. Formed from sheet aluminum and mounted on aluminum enclosing cover, or shell, of streamline design.
GUARD:	Ornamental design and finish—sturdy welded construction.
BASE:	Desk Fans—Felt covered—friction clamp in base provides for tilting fan to direct the air upward or downward, and automatically holds fan in desired position.
BASE AND STAND:	Type 5460-AA adjustable stand, minimum 3'3", maximum 4'9", floor to center of fan.
OSCILLATION:	Fully enclosed mechanism—conceals and protects moving parts, sealed against oil leaks. Smooth, uniform oscillating motion insured by ball bearings in base socket. Emerson Standard Oscillating Arrangement—adjusting case provides finger-tip control of oscillation and adjusting arc of oscillation from 90° to any lower range or stationary position.
FINISH:	Types 5250-B and 5460—Attractive combination of mahogany lacquer on guard and base, and highly polished, natural aluminum finish on fan assembly and streamlined enclosing covers on motor. Type 7250 "Imperial" Model—Beautiful black satin finish over all parts except guard and toggle switch, these parts are finished in gleaming, polished chromium. Floor Stand Fan—Type 5460-AA—Harmonious combination of mahogany lacquer on motor, blades and back of guard. Face of guard polished chromium. Base and lower section of stand, mahogany wrinkle finish, with top section of stand in polished chromium.

Testifying to EMERSON Quality

"* * * is a real heavy fan with pins on the back and one says start and then you switch it on the next one which says run, and it surely runs smooth. The serial number on it is 35784 dated Feb. 4th, 1893."

Owner
Parkersburg, W. Va.





**EMERSON 5-Year
Factory-to-User
Guarantee**

EMERSON 10, 12 and 16-inch Fans with Patented Overlapping Blades

SIZE	STYLE	VOLTS	CURRENT	SPEEDS AND WATTS			*AIR DELIVERY	WEIGHT		TYPE No.	CODE WORD	LIST PRICE EACH	
				1550 rpm	40 watts	Single-speed		NET	PKD.				
10"	Osc.	110	60 cy.	1550 rpm	40 watts	Single-speed	610 CFM	12	17	6250	SECOL	\$14.45	
10"	Osc.	110	60 cy.	1550 rpm	40 watts	With adj. floor stand	610 CFM	21	29	6250-AA	SOGOR	19.95	
12"	Osc.	110	60 cy.	1550 rpm	45 watts	1340 rpm	1080 CFM	22	32	77646-AK	SOPEX	28.00	
16"	Osc.	110	60 cy.	1500 rpm	60 watts	1380 rpm	1150 rpm	1550 CFM	24	38	77648-AK	SOHAN	35.00
					55 watts	39 watts							
					50 watts								

* CFM—Cubic feet of air per minute on high speed.

Regularly carried in stock at St. Louis, New York, Chicago and by conveniently located wholesalers.

Fans will operate satisfactorily on voltage 10% above or below rated voltage. 50-cycle speed approximately 15% lower.

Special finish fans furnished to special order—see Price List.

No fans made for voltages higher than 250 volts. Performance data subject to variation of 10% plus or minus (all data subject to change).

All fans packed one in a box. (Type 6250-AA packed completely assembled.)

1899 Model Emerson Fan

"I am sending a photo of an obsolete Emerson Fan. I said obsolete because a few years ago I wanted a new base for this fan and your company stated this fan was obsolete and destroyed all patterns, so I put on a flat leg and this answered the purpose. This fan has been in use since that time and is running fine today."

Owner, Jacksonville, Ill.



EMERSON 10-12 and 16-inch Fans ▲ Overlapping Blades

Featuring the Stately New 10-inch Fan with Polished Aluminum Blades, on Adjustable Floor Stand, and the New 12 and 16-inch Oscillators with Capacitor Motors.



These fans are being widely used in homes and all types of business places, where quiet operation, large breeze capacity and dependable service are essentials. The assortment of sizes and models offer a complete price range.

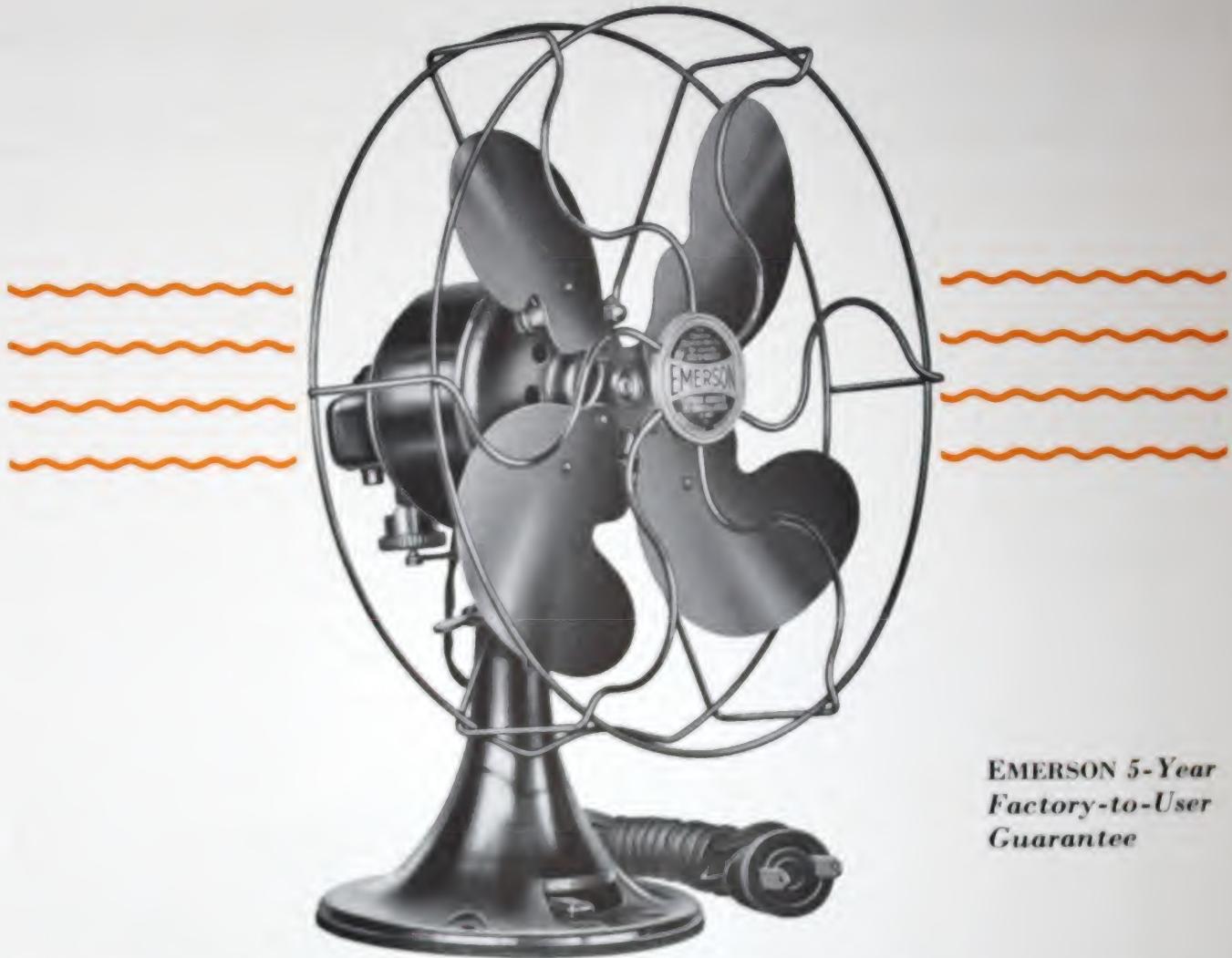
Those who seek convenience, in addition to summer comfort, will find the two perfectly combined in the new 10-inch floor-stand oscillator. It can be moved about, adjusted to height, and tilted up or down, to give cool comfort alongside a chair, bridge table, in the dining-room or on the sun porch. It will also find a ready welcome in offices and stores.

The new 12 and 16-inch fans with capacitor motors reduce the time required to attain full speed 55% to 85%, and current requirements have been cut 25% to 40%, important savings when cost of operation is considered.

Show these Emerson Overlapping Blade Fans prominently in your windows and on your counter. There is a ready market.

Detail Specifications.

MOTOR:	10-inch Fans—Induction type motor, no brushes or mechanical starting device. 12 and 16-inch Fans—Capacitor type motors, no brushes or mechanical starting device.
SHAFT:	10-inch Fans—Solid steel shaft, 5/16-inch diameter. 12 and 16-inch Fans—1/2-inch diameter, case hardened, hollow steel shaft, pressed into motor frame.
BEARINGS:	10-inch Fans—Liberal size bronze bearings, grooved to distribute the oil evenly. 12 and 16-inch Fans—Oil-tight dust-proof bearings.
LUBRICATION:	10-inch Fans—Oil, fed by cotton wicking from both upper and lower reservoirs. 12 and 16-inch Fans—Oil fed from oil cup at back of motor to hollow shaft. Only one place to oil. Force-feed oiling system of lubrication.
SWITCH:	10-inch Fans—Type 6250, single-speed sliding switch in base. Type 6250-AA, single-speed toggle switch in top of stand. 12 and 16-inch Fans—Three-speed sliding switch in base.
CORD:	Rubber covered cord and plug attached. Approved by Underwriters.
BLADES:	Aluminum—Patented Design—specially treated to prevent corrosion. (Type 6250-AA—Polished aluminum blades.)
OSCILLATION:	Adjusting case permits <i>finger-tip</i> control and adjusting arc of oscillation from 90° to any lower range or stationary position.
SWIVEL ADJUSTMENT:	12 and 16-inch Fans—Exclusive Emerson feature permits changing the center of oscillation arc within a 90° radius—5 positions.
GUARD:	Double ring guard of heavy gauge wire, spot welded.
BASE:	Desk Fans—"Patented" friction hinge for tilting fans up or down, or for wall (bracket) mounting. Felt covering prevents marring of polished surfaces.
BASE AND STAND:	Type 6250-AA adjustable stand, minimum 3'3", maximum 4'9" floor to center of fan. Friction hinge for tilting up or down.
FINISH:	Desk Fans—Lustrous baked black enamel on motor, base, and guard—blades, black lacquer, satin finish. Floor Stand Fan—Type 6250-AA, lustrous baked black enamel on motor coupling and guard. Polished chromium plated stand tubes. Blades in polished aluminum. Base wrinkled black finish.



**EMERSON 5-Year
Factory-to-User
Guarantee**

EMERSON 8 and 10-inch Fans ▲ Parker Blades

SIZE	STYLE	VOLTS	CURRENT	SPEEDS AND WATTS			AIR DELIVERY	WEIGHT		TYPE No.	CODE WORD	LIST PRICE EACH
				NET	PKD.			NET	PKD.			
8"	Osc.	110	60 cy.	1650 rpm. 30 watts	1-speed only		400 CPM	8	13	2240-B	SEPON	\$ 9.95
10"	Non-Osc.	110	60 cy.	1550 rpm. 40 watts	1-speed only		570 CPM	9	15	2150	SCHEF	9.95
10"	Osc.	110	60 cy.	1550 rpm. 40 watts	1-speed only		570 CPM	11	16	2250-B	SEHEN	12.95
10"	Non-Osc.	115	D. C.	1750 rpm. 33 watts	1-speed only	1350 rpm. 23 watts	500 CPM	9	16	76045	TADEC	14.95
10"	Osc.	115	D. C.	1750 rpm. 33 watts	1-speed only	20 watts	570 CPM	10	17	71045	TIPOH	18.95

* CPM—Cubic feet of air per minute—high speed.
Regularly carried in stock at St. Louis, New York, Chicago and by
conveniently located wholesalers.
Fan will operate satisfactorily on voltage 10% above or below rated
voltage. 30-cycle speed approximately 15% lower.

Special finish fans furnished to special order—see Price List.
No fans made for voltages higher than 250 volts. Performance data
subject to variation of 10% plus or minus (all data subject to
change).
All fans packed one in a box.

Emerson Fan Owner Reports:

"I feel it my duty to write you regarding a 12-inch fan that I purchased about 1907. For 20 years I ran this fan through the summer months, night and day; and for the last seven years, I have used it to operate two 5-foot turn-tables in my show room windows 265 days of each year from 8 a. m. until 10 and 11 p. m."

"I have never touched a tool of any kind to this fan or never cleaned it, only oiled it twice yearly and as near as I can estimate, this fan has run 42,645 hours."

"It has not finished the race yet, and if I outlive the fan, in later years I'll send you a real record."

"I believe this fan will reach one hundred thousand hours of service without 1 cent of repairs."

Owner, St. Louis, Mo.

EMERSON 8 and 10-inch Fans • Parker Blades

Again, in 1937, These Small Emerson Fans Will Lead the Field in Value and in Sales.

It takes more than reputation to capture the complete confidence of the buying public. Year after year, there has been an ever increasing demand for these small Emerson fans and there is a definite reason for their popularity—extra service—extra features, not found even in many larger and more expensive fans.

All parts are manufactured to extremely close limits and every step of production is carefully checked. Final, exacting operation tests are made

to assure each fan being worthy of its Emerson Electric nameplate.

Like the Larger Emerson Fans, they carry the same liberal Emerson 5-year factory-to-user guarantee. Measured in years of service, they earn their purchase price many times over.

Wool-packed bearings, finger-tip oscillation control, "patented" friction hinge for tilting fan up, down, or for wall mounting and sliding switch in base, are just a few of the construction details that help establish sales records.

Detail Specifications

MOTOR:	A. C. Fans—Induction type motor, no brushes or mechanical starting device. D. C. Fans—Fully enclosed motor, brush and commutator type—brushes readily renewable without dismantling motor.
SHAFT:	Solid steel shaft 5/16-inch diameter.
BEARINGS:	A. C. Fans—Liberal size bronze bearings, grooved to distribute the oil evenly. D. C. Fans—Large bronze bearings, wool packed.
LUBRICATION:	A. C. Fans—Oil, fed by cotton wicking from both upper and lower reservoirs. D. C. Fans—Wool packing holds oil in suspension and cotton wicking feeds it to the shaft.
SWITCH:	A. C. Fans—Single-speed sliding switch in base. D. C. Fans—Three-speed sliding switch in base.
CORD:	Rubber covered cord and plug attached. Approved by Underwriters.
BLADES:	Steel, corrosion resisting, Parker design.
OSCILLATION:	Adjusting case permits <i>finger-tip</i> control and adjusting arc of oscillation from 90° to any lower range or stationary position. No tools are needed.
SWIVEL ADJUSTMENT:	Emerson exclusive design of oscillating mechanism has an enviable service record. The substantial gearing is fully enclosed, which conceals and protects moving parts, and is sealed against oil leakage.
GUARD:	D. C. Fans—Exclusive Emerson feature permits changing the center of oscillation arc within a 90° radius—5 positions.
BASE:	Double ring guard of heavy gauge wire, spot welded.
FINISH:	"Patented" friction hinge for tilting fans up or down, or for wall (bracket) mounting. Felt covered.

NOTE: Above specifications apply to 10-inch oscillating fan, listed on page 5, with exception of finish.

Going Since 1903—

"Bought this fan in Hot Springs and later brought it to Muskogee, Okla., in 1905 and has been working every day, even in winter, in drying photograph films."

Owner, Muskogee, Okla.



EMERSON 12 and 16-inch Fans ▲ Parker Blades

Emerson 12 and 16-inch Fans — Parker Blades — New Capacitor Motors on A. C. Types — Quicker Starting — Lower Current Requirements — Finger-tip Oscillation Control.

Another major improvement in Emerson A. C. Fan performance is announced for 1937, although the popular belief exists that there was no way in which these fine fans could be further improved.

Now, the time required to bring the fans up to full speed has been reduced 35 seconds and current consumption has been cut 24% to 33½%.

This is a tremendous advantage when considering the installation of a group of fans, as the saving in current alone, over a period of years, will

reach an impressive figure. Add to this saving the other Emerson Fan features of finger-tip oscillation control—adjusting collar—5-Year Guarantee and the long service obtainable with these fans, then you have ample reasons why Emerson Parker Blade Fans are the best known and most favored by the buying public.

Stock these fans early in the season—they sell to all kinds of commercial users, industrial plants and for home use.

Detail Specifications

An Emerson Old-Timer

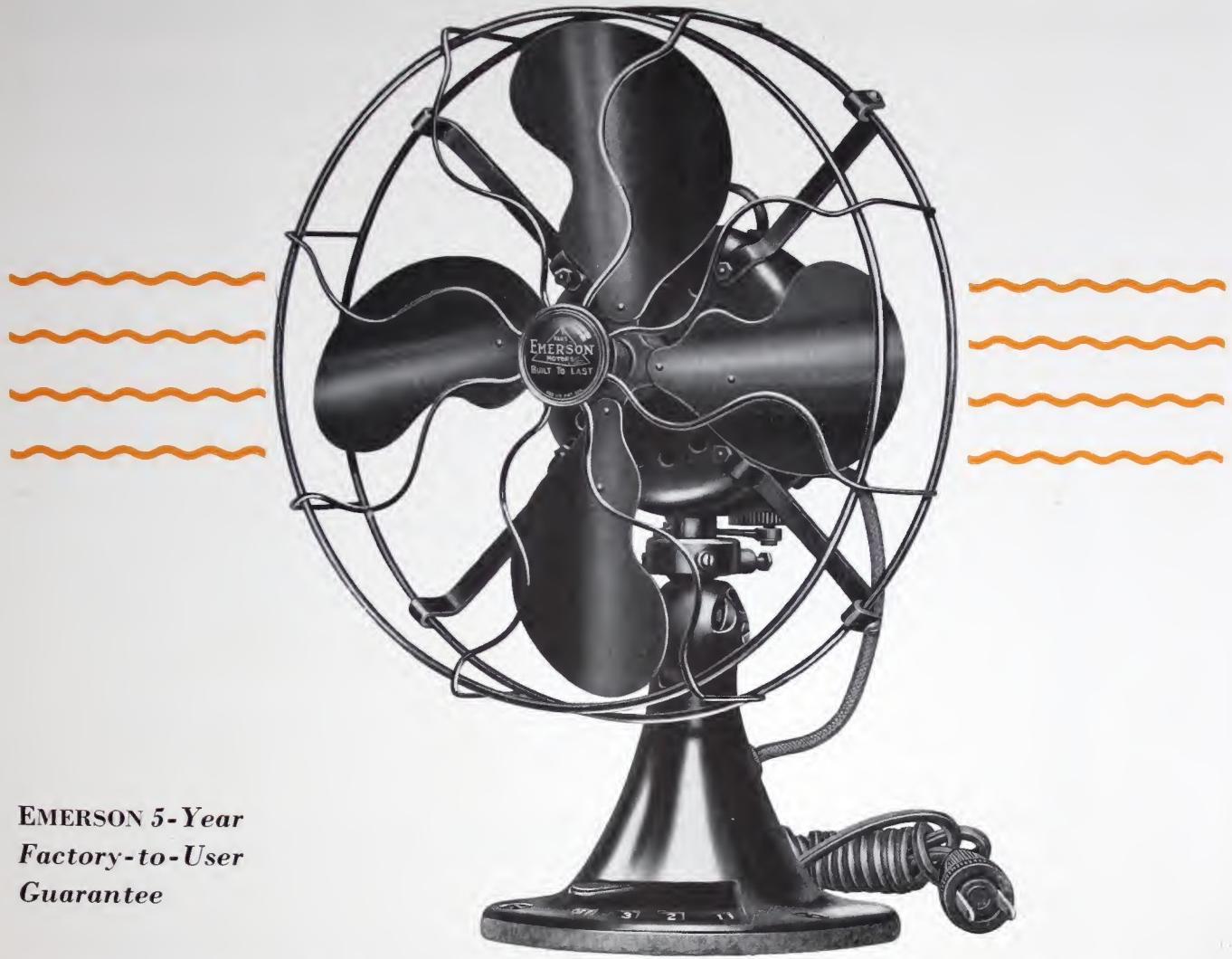
Kansas City owner writes, "How is this for an old King Tut? This fan has been in service since 1898. We use it in the summer and also to circulate heat from a stove in winter. There is nothing wrong with it except in the speed regulation, but it runs O. K. on high speed."



MOTOR:	A. C. Fan—Capacitor type—no brushes or mechanical starting device. D. C. Fan—Brush and commutator type—brushes readily renewable without dismantling motor. Fully enclosed motor.
SHAFT:	A. C. Fan—½-inch diameter, case hardened, hollow steel shaft. D. C. Fan—Solid steel shaft ¾-inch diameter.
BEARINGS:	A. C. Fan—Oil-tight, dust-proof bearings. D. C. Fan—Large size bronze bearings, grooved to distribute the oil evenly.
LUBRICATION:	A. C. Fan—Oil, fed from oil cup in back of motor to hollow shaft. Forced feed system of lubrication. D. C. Fan—Wool packing holds oil in suspension and cotton wicking feeds it to the shaft.
SWITCH:	Three-speed sliding switch in base.
CORD:	Rubber covered cord and plug attached. Approved by Underwriters.
BLADES:	Steel (Parkerized), corrosion resisting, Parker design.
OSCILLATION:	Adjusting case provides <i>finger-tip</i> control and instant adjustment of arc of oscillation from 90° to any lower range or stationary position, without tools of any kind. The Emerson oscillating mechanism has an enviable service record. Worm gear and oscillating link are made from solid bronze—worm and pinion are of steel and the worm is case hardened. It is fully enclosed, which conceals and protects moving parts, and is sealed against oil leakage.
SWIVEL ADJUSTMENT:	Exclusive Emerson feature permits changing the center of oscillation arc within a 90° radius—5 positions.
GUARD:	Double-ring guard of heavy gauge wire, spot welded.
BASE:	"Patented" friction hinge for tilting fans up or down, or for wall (bracket) mounting.
FINISH:	Felt covering readily renewable if it becomes torn or worn. Protects polished surfaces. Lustrous baked black enamel on motor, base and guard—blades in satin black lacquer.
	NOTE: Above specifications apply to 12-inch and 16-inch chromium plated oscillating fans, listed on page 5, with exception of finish.

EMERSON 5-Year Factory-to-User Guarantee

Emerson Electric Fans are guaranteed for 5 years against electrical or mechanical defects. There are six important reasons why this guarantee can be offered and why Emerson Fans give so many years of trouble-free service. 1. Careful selection of raw materials. 2. Testing of parts through each stage of production. 3. Final thorough testing of assembled fan. 4. The special bearing design, due to extremely close limits, assures long service. 5. Efficient lubrication keeps the fans running smoothly with only a minimum of attention. 6. The experience gained in 46 years of fan manufacturing makes it possible to build fans that will give 4 to 5 times the length of service covered by the guarantee.



**EMERSON 5-Year
Factory-to-User
Guarantee**

EMERSON 12 and 16-inch Fans • Parker Blades

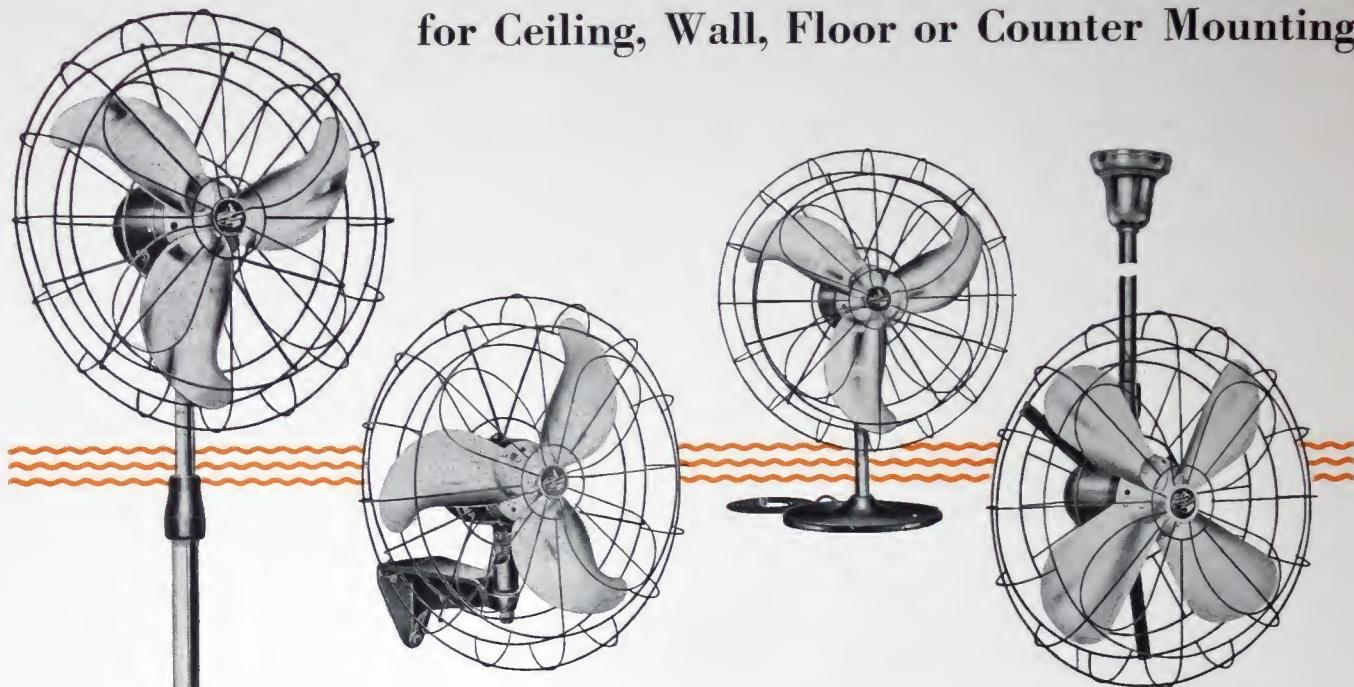
SIZE	STYLE	VOLTS	CURRENT	SPEEDS AND WATTS			* AIR DELIVERY	WEIGHT		TYPE No.	CODE WORD	LIST PRICE EACH
				NET	PKD.			NET	PKD.			
4-BLADE—3-SPEED FANS—ALTERNATING CURRENT												
12"	Non-Osc.	110	60 cy.	1500 rpm 40 watts	1450 rpm 38 watts	1300 rpm 36 watts	1050 CFM	20	29	28646	SEVAM	\$21.00
12"	Osc.	110	60 cy.	1550 rpm 72 watts	1380 rpm 70 watts	1150 rpm 68 watts	1600 CFM	21	31	73646-AK	SOHOS	25.00
16"	Osc.	110	60 cy.	1290 rpm 60 watts	1190 rpm 55 watts	1050 rpm 45 watts	900 CFM	23	38	73648-AK	SOFEM	32.00
12"	Osc.	110	25 cy.	1280 rpm 82 watts	1170 rpm 60 watts	1050 rpm 50 watts	1300 CFM	28	46	73246	SCASF	26.50
16"	Osc.	110	25 cy.					30	51	73248-AA	SCARD	33.50
4-BLADE—3-SPEED FANS—DIRECT CURRENT												
12"	Non-Osc.	115	D. C.	1700 rpm 60 watts	1300 rpm 45 watts	900 rpm 35 watts	1100 CFM	22	35	28046	TILIX	23.00
12"	Osc.	115	D. C.	1700 rpm 60 watts	1300 rpm 45 watts	900 rpm 35 watts	1100 CFM	23	38	75046	TIZEM	28.50
12"	Osc.	230	D. C.	1700 rpm 60 watts	1300 rpm 45 watts	900 rpm 35 watts	1100 CFM	23	38	75046	TODET	30.00
16"	Osc.	115	D. C.	1700 rpm 70 watts	1300 rpm 55 watts	900 rpm 45 watts	1650 CFM	25	42	75048	TOCAX	35.00
16"	Osc.	230	D. C.	1700 rpm 70 watts	1300 rpm 65 watts	900 rpm 55 watts	1650 CFM	25	42	75048	TODUX	36.50

* CFM—Cubic feet of air per minute—high speed.
Regularly carried in stock at St. Louis, New York, Chicago and by
conveniently located wholesalers.
Fans will operate satisfactorily on voltage 10% above or below rated
voltage. 50-cycle speed approximately 15% lower.

Special finish fans furnished to special order—see Price List.
No fans made for voltages higher than 250 volts. Performance data
subject to variation of 10% plus or minus (all data subject to
change).
All fans packed one in a box.

EMERSON Air Circulators for 1937 and Accessories

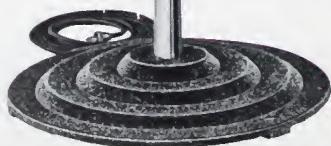
for Ceiling, Wall, Floor or Counter Mounting



Illustrating Type S60WC
4-blade Design

New, Three-blade Fans Are Furnished on All Types Except the 24-inch, 1-speed, A. C. (Type S60WC), Which Is a 4-blade Fan

EMERSON
Air Circulators
Are Guaranteed
for One Year



New Features in Mounting Accessories Simplify Installation... Counter and Floor Column Mountings Complete with Rubber-Covered Cord and Plug... Mountings Listed Can Be Used with All Five Air Circulator Types

SIZE	No. Blades	VOLTS	CURRENT	SPEEDS	R. P. M. AND WATTS	*AIR DELIVERY	†AIR DELIVERY	WEIGHT		TYPE No.	CODE WORD	LIST PRICE EACH	
								NET	PKD.				
24"	4	110	60 cy.	1	1140 rpm 185 watts Single-speed	3600 CFM	7000 CFM	36	59	S60WC	KOHAR	\$41.00	
24"	3	110	60 cy.	2	1140 rpm 270 watts 170 watts	860 rpm 570 rpm	4800 CFM	8200 CFM	37	60	S60WA	KODOR	47.50
30"	3	110	60 cy.	2	1140 rpm 355 watts 260 watts	570 rpm 145 watts	6000 CFM	10,200 CFM	41	62	S60WB	KNOPT	60.00
†24"	3	115	D. C.	1	1140 rpm 285 watts	Single-speed	4800 CFM	8200 CFM	38	61	D60TL	TEZEK	56.00
†30"	3	115	D. C.	1	1140 rpm 285 watts	Single-speed	6000 CFM	10,200 CFM	42	63	D60TM	TEZOM	68.50
Ceiling Mounting Fittings (no hanger pipe).....													
Adjustable Floor Column Mounting, Min. 4'11", Max. 8'4", floor to center of fan.....												KOBON 2.50	
Counter Column Mounting, 1'8", base to center of fan.....												KOCAL 18.50	
Wall Bracket Mounting 1'2", extension from wall.....												KODEN 10.00	
												KOGER 8.50	

* CFM—Cubic feet of air per minute—high speed—reading taken (Standard NEMA Test Method) one foot from fan.
† CFM—Cubic feet of air per minute—high speed—reading taken 5 feet from fan.
† For 2-speed D. C. Air Circulators add \$6.50 to list prices of 1-speed D. C. Air Circulators.
Air Circulator prices apply to fans only, without mounting fittings.

Fans can be furnished specially for 220 volts, 60 cycles. No fans made for voltages higher than 250 volts.
Performance data subject to variation of 10% plus or minus. All data subject to change.
Motor packed in box—blades and guard in separate carton.
Regularly carried in stock at St. Louis, New York, Chicago and by conveniently located wholesalers.

EMERSON 24 and 30-inch Air Circulators

Thousands in Use—Thousands More Will Be Installed in 1937. New Three-blade Fans Give Quieter Operation and Greater Breeze Penetration.... All Types Have Powerful, Ball-bearing Motors.

For cooling, comforting breezes, for thorough ventilation and dependable, economical service, Emerson Air Circulators fill all requirements.

These new 3-blade circulators give greater breeze penetration without increase in current consumption, and quiet, smooth operation. Each of the five types can be used with either of the four styles of mountings.

Emerson Air Circulators are recommended for installation in all public places, and wherever there is a problem of providing cooling breezes over large areas, such as retail stores and shops, taverns,

restaurants, churches, recreation buildings, industrial plants, etc.

The conventional type of fan gives a localized distribution of air, and even where there is a complete installation of wall or ceiling fans, the addition of Emerson Air Circulators will measurably improve the ventilation and cooling effect of all the fans.

Read the specifications—order an assortment of fans and mountings. Be prepared to supply the demand that comes with the first warm days.

Detail Specifications

MOTOR:

A. C. Fans—Induction type, fully enclosed, streamlined design, leads extended twenty inches from motor.

D. C. Fans—Fully enclosed motor, brush and commutator type—brushes readily renewable without dismantling motor.

SHAFT:

Solid steel shaft $\frac{5}{8}$ " diameter.

BEARINGS:

Ball bearings, grease packed.

LUBRICATION:

As shipped from the factory, fans will give several normal seasons of service before re-lubrication is necessary. (Approximately 6000 hours.)

SWITCH:

Canopy pull switch in back cover of motor.

BLADES:

Type S60WC 4 blades formed steel, chromium plated. Other types, 3 blades, formed heavy gauge, aluminum—highly polished.

GUARD:

Two-piece ornamental design guard of heavy gauge wire—spot welded.

ADJUSTMENT:

Can be tilted to any position from 8° above horizontal to 25° below horizontal in ceiling mounting or vice versa in column mounting. Insulated with rubber in mounting yoke.

FINISH:

Lustrous baked black enamel finish on motor and guard—Type S60WC blades in polished chromium; other types, blades, in polished aluminum.

CEILING MOUNTING FITTINGS:

MOUNTING ACCESSORIES

Consist of motor socket, round malleable flanged hanger with four lag screws and ceiling canopy, finished in black (no hanger pipe).

FLOOR COLUMN MOUNTING:

Adjustable floor column mounting permits placing the fan within the following range—minimum 4'11", maximum 8'4", from floor to center of fan. Base drilled for attachment to floor. Furnished with 20 feet of rubber covered cord and plug, with connector, for attachment to motor leads, installed in stand column. Base packed separately. Base finished in black wrinkle with seamless steel tube finished in polished chromium. Coupling and motor socket finished in baked black japan.

COUNTER MOUNTING:

Made in one size with center of fan 1'8" from the bottom of the base. Base drilled for attachment to counter. Furnished with 12 feet of rubber covered cord and plug, with connector, for attachment to motor leads, installed in stand column. Base and motor socket finished in baked black japan—column, seamless steel tube finished in polished chromium plate.

WALL BRACKET MOUNTING:

Furnished complete with stud, motor socket and lag screws for attachment to wood construction. Extends 14" from wall and provides swivel adjustment to either side. Finished in baked black japan.

NOTE: Above specifications apply to Air Circulators and Mounting Accessories, listed on page 5, with exception of finish.

Precision —

After the assembly and balancing operations, Air Circulator blades are individually tested. The operator checks the shaft recess, rigidity of rivets and gives the blade a running test on motor of the type with which it is to be used—a further check against possible operating vibration.



EMERSON Ceiling Fans with New Switch Covers

Smooth, Quiet, Economical Operation, and Oil Reservoir May Be Drained and Refilled Without Removing Fan from the Ceiling.

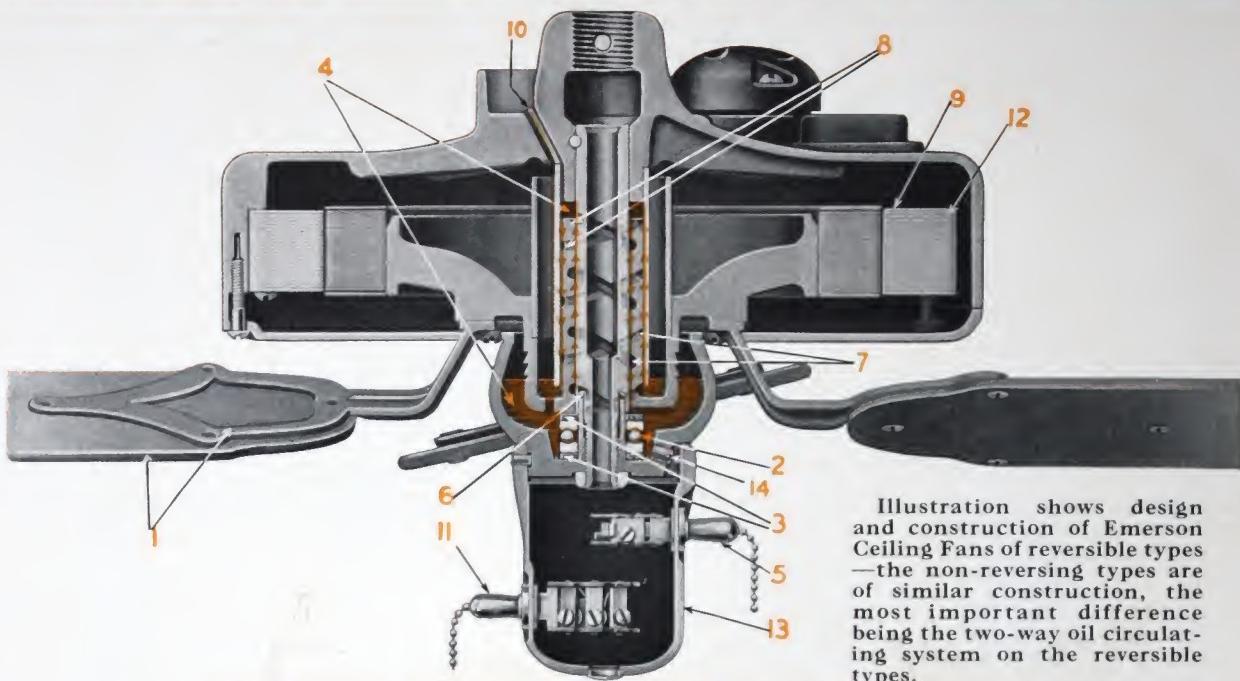


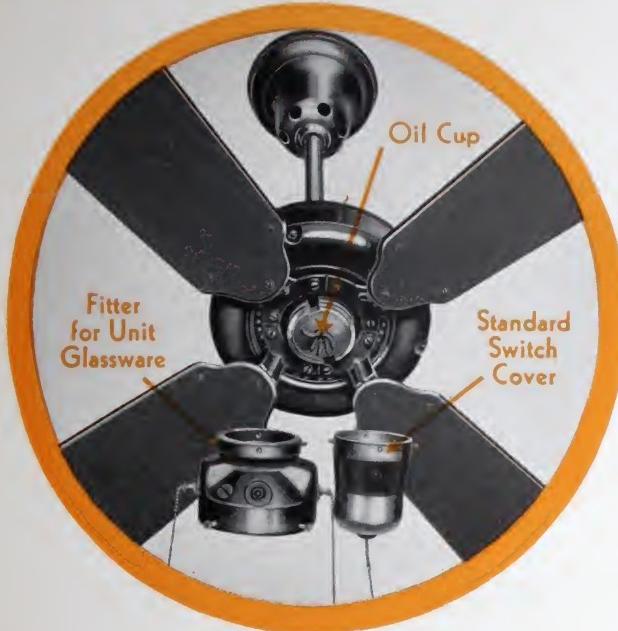
Illustration shows design and construction of Emerson Ceiling Fans of reversible types—the non-reversing types are of similar construction, the most important difference being the two-way oil circulating system on the reversible types.

FOURTEEN EMERSON FEATURES OF PERFECTION

1. Blades and blade flanges are accurately balanced to insure smooth and even running.
2. The ball bearings (12 balls to set) rotate between grooved races of hardened steel, ground and polished to fit the curvature of the balls. This gives quiet operation and increases the life of the bearing.
3. Felt washers between the lower bearing race and oil cup and between the upper bearing race and armature hub eliminate the transmission of bearing noise.
4. The upper oil reservoir is almost completely enclosed by the special design of the top motor canopy and armature core. The lower oil reservoir is also well protected as the apron of the armature extends over and close to the edge of the oil cup. This construction prevents the entrance of foreign matter into the oiling system and makes it practically dust-proof.
5. A canopy pull switch on the switch cover of the reversible types can be operated to reverse the rotation of the fan, giving the full air movement of the normal down-draft operation or the less disturbing up-draft, while the fan is in operation. The reversing action may, however, be controlled from a wall switch if desired.
6. Oil leakage is prevented by a special sealing washer between the shaft and oil cup.
7. The forced-feed oil circulating system is the most important feature in the mechanical construction of Emerson Ceiling Fans and is largely responsible for the long life of these fans. The oil line is above the ball bearing so that ball bearings and races are submerged and the balls rotate in oil. There is an inlet directly above the top felt washer that permits the oil to reach the armature shaft bearing. On the non-reversible types the armature core has a spiral groove which carries the oil to
8. the upper oil reservoir, lubricating the entire shaft surface as it forced upward. There is an oil return duct in the armature core through which the oil is returned to the lower reservoir maintaining a continuous re-circulating oiling system. On Emerson Reversible Ceiling Fans the forced feed oil circulating system is basically the same with the addition of a separate and distinct oil groove to keep up a continuous circulation of oil up and down the shaft regardless of the direction of rotation. The arrows and color lines indicated by (7) shows the course of the oil travel when fan operates with air stream upward and (8) shows the course of the oil travel when fan operates with air stream downward.
9. Field coils are wound over fibre insulating forms and the coils are completely taped to eliminate the possibility of grounds between coils and field iron.
10. A drilled hole in the top cover casting provides a passage for oil directly to the oil reservoir.
11. Three-speed and off canopy pull switch for controlling operation of the fan.
12. The field structure consists of a main field winding (9) and a starting winding the same as in a standard single rotation fan. On the reversible types the addition of the reversing feature necessitates merely the addition of one starting winding, in no way increasing the chances of motor failure or power consumption. Both starting windings are independent of the main winding and may be remotely operated by any type of wall switch if so desired.
13. Switch cover, removable without breaking oil seal or dismantling fan.
14. Oil drain plug, permits changing oil without removing fan from ceiling.

Easily Converted for Use with Lights

Switch Cover Can Be Replaced by Fitter for Unit Glassware in a Few Minutes . . .
Without Breaking the Original Factory Oil Seal.



The, new improved oil cup and separate switch cover (interchangeable with fitter for unit glassware) are now standard equipment on all Emerson Ceiling Fans.

Now the oil cup and switch cover are made separately. The switch cover may be removed and a fitter for unit glassware put in its place, without disturbing any part of the bearing assembly or breaking the original factory oil seal. The change can be made without removing the fan from the ceiling.

Another innovation is an oil drain plug in the oil cup which permits draining and cleaning the oil reservoir without removing the fan from the ceiling.

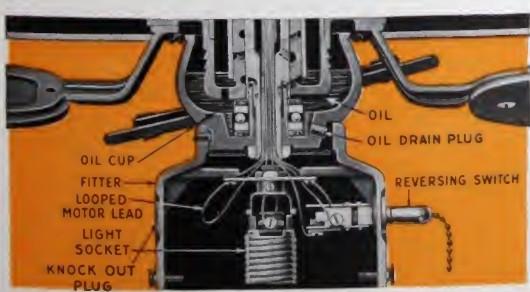
The illustration at the left shows in detail this new construction with oil cup in position on the fan and switch cover and fitter for unit glassware. The only tool required to remove or replace the switch cover or fitter is a small screwdriver.

All Fans Wired for Lights

Emerson Ceiling Fans are designed for use with lighting fixtures, which is of extreme importance due to the more frequent use of ceiling fans with fixtures and the variety of fixtures wanted.

In addition to the types for use with unit glass-

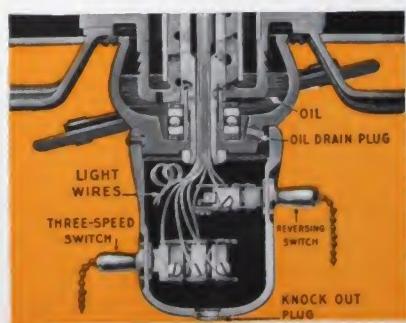
ware, as listed on page 22 of this catalog and regularly carried in stock, others can be furnished to special order, and as all Emerson Ceiling Fans are wired for lights, changes can readily be made in the field to adapt standard stock types to fit other requirements.



Sectional View of Type 86641-AA

Sectional view at right, is Type 87641 reversible fan, showing how light wires are made accessible for easy connection to light socket. This is standard on all Emerson Ceiling Fans, for convenience if fan is later equipped with light unit.

Sectional view, at left, shows standard fitter on Type 86641-AA reversible fan with motor wire looped inside of fitter for connection to switch if desired, for control of motor from the fan.



Ceiling fans are becoming increasingly important as the need for adequate air circulation becomes more apparent. Hotels, offices, restaurants, stores and homes, all are included in the active market for the sale of ceiling fans.

Emerson has been the leader in value since ceiling fans were first introduced, with more long-life construction features, more dependable and economical operation, and a service record that grows more impressive with each passing year.



EMERSON 36 and 56-inch Ceiling Fans Non-Reversible Types—Air Flow Downward

EMERSON 5-Year Factory-to-User Guarantee

SIZE	STYLE	VOLTS	CURRENT	SPEEDS AND WATTS			*AIR DELIVERY	WEIGHT		TYPE No.	CODE WORD	LIST PRICE EACH
				NET	PKD.			NET	PKD.			
36"	Standard	110	60 cy.	330 rpm 78 watts	235 rpm 60 watts 2-speed only		3630 CFM	28	33	84641	SEGOP	\$37.00
56"	Standard	110	60 cy.	225 rpm 160 watts	180 rpm 125 watts	140 rpm 100 watts	7600 CFM	58	66	85641	SODON	47.00
56"	Standard	115	D. C.	230 rpm	185 rpm	140 rpm	7750 CFM	55	82	85041	TOMOB	55.00
56"	Standard	230	D. C.	105 watts	80 watts	55 watts		55	82	85041	TOMUC	57.00

* CFM—Cubic feet of air per minute—high speed.
Regularly carried in stock at St. Louis, New York, Chicago and by
conveniently located wholesalers.
Fans can be furnished specially for 220 volts, 60 cycles. No fans
made for voltages higher than 250 volts.

Performance data subject to variation of 10% plus or minus. All
data subject to change.
Packed one motor and fittings in carton. Blades with flanges and
ceiling canopy in separate carton.

A Ceiling Fan Veteran

"This Emerson ceiling fan was purchased in 1900 or
1901 and has been hanging over our dining table and
in regular use since * * *. This fan has never given
us a bit of trouble."

Owner, Augusta, Ga.



EMERSON 36 and 56-inch Ceiling Fans

Standard Equipment in Many of the Nation's Finest Building Installations.
Now—Greater Value Than Ever Before.

Emerson 36 and 56-inch ceiling fans represent an outstanding value. The precision methods under which these fans are manufactured are reflected in the service records of the countless thousands installed. Many in use for twenty and more years are still giving economical, efficient service.

The new switch cover feature gives Emerson Ceiling Fans added value, as they may be converted for use with unit glassware without dismantling or breaking the original factory oil seal. Oil draining is also a simple operation, eliminating

entirely the former necessity of removing the fan from the ceiling.

Architects and engineers readily accept Emerson ceiling fans for office buildings, hotels, hospitals, banks and other public buildings . . . further evidence of their recognized superiority.

By every measure of comparison Emerson Ceiling Fans offer the biggest dollar for dollar value and they carry the unqualified Emerson Electric factory-to-user 5-year guarantee.

Detail Specifications

MOTOR:

A. C. Fans—Induction type—slow speed—quiet.
D. C. Fans—Brush and commutator type—brushes accessible for ready renewal.
Will operate satisfactorily on voltage 10% above or below rated voltage.

SHAFT:

Hollow steel shaft (36-inch fans have $\frac{5}{8}$ -inch diameter shaft).
(56-inch fans have $\frac{7}{8}$ -inch diameter shaft.)

BEARINGS:

Ball bearings with hardened steel, grooved races—ground and polished to fit the balls, submerged and run in oil bath.

LUBRICATION:

Oil, forced-feed system of lubrication by spiral oil grooves in the armature core with oil drain plug in oil cup which permits changing oil and flushing out oil reservoir without removing fan from ceiling.

SWITCHES:

A. C. Type 84641 has 2-speed pull switch in switch cover.
A. C. Type 85641 has 3-speed pull switch in switch cover.
D. C. Type 85041 has 3-speed pull switch in switch cover.

BLADES:

Seasoned basswood—each set balanced.
Type 84641 has 13° dip blades.
Types 85641 and 85041 have 14° dip blades.

FINISH:

Mahogany-lacquer finish over motor and trimmings—blades in hand-rubbed mahogany finish to match. (For special-finish fans, furnished specially, see price list.)

FITTINGS:

Standard equipment includes ceiling canopy, ceiling hook, and insulating hanger eye; 36" fans tapped for $\frac{1}{2}$ " hanger pipe, 52" and 56" fans, tapped for $\frac{3}{4}$ " pipe. Hook with adapter to fit $\frac{1}{2}$ " or $\frac{3}{8}$ " fixture stud furnished without extra charge. (No hanger pipe furnished.)

LIGHTS:

All fans wired for lights at the factory.
Ends of light wires looped in switch cover for convenience in connecting to light socket at any time it might be decided to equip fans with lighting fixtures.

WIRES:

Upper ends of light and motor wires extend 36" from top of motor canopy—usually sufficient to reach outlet box in ceiling without splicing.

Each ceiling fan is individually tested on a sounding board for any possibility of noise or vibration. The slightest noise is amplified by the sounding board and the cause of noise is corrected before packing.



EMERSON 36 and 52-inch Ceiling Fans

Electrically Reversible Operation—Air Flow Up or Down with the Mere Operation of the Reversing Switch, and without Change in Mechanical Parts.

The fine performance built into Emerson non-reversible ceiling fans could not be improved, so the only way in which their utility could be enhanced was by making them dual purpose fans. Just how completely the Emerson electrically reversible fan has met the needs for just such a fan is being answered by the thousands now in service.

Many methods, electrical and mechanical, have been employed for reversing air flow, but none have been more permanently dependable, simple

in operation or effective in service than the Emerson designed electrical reversing action.

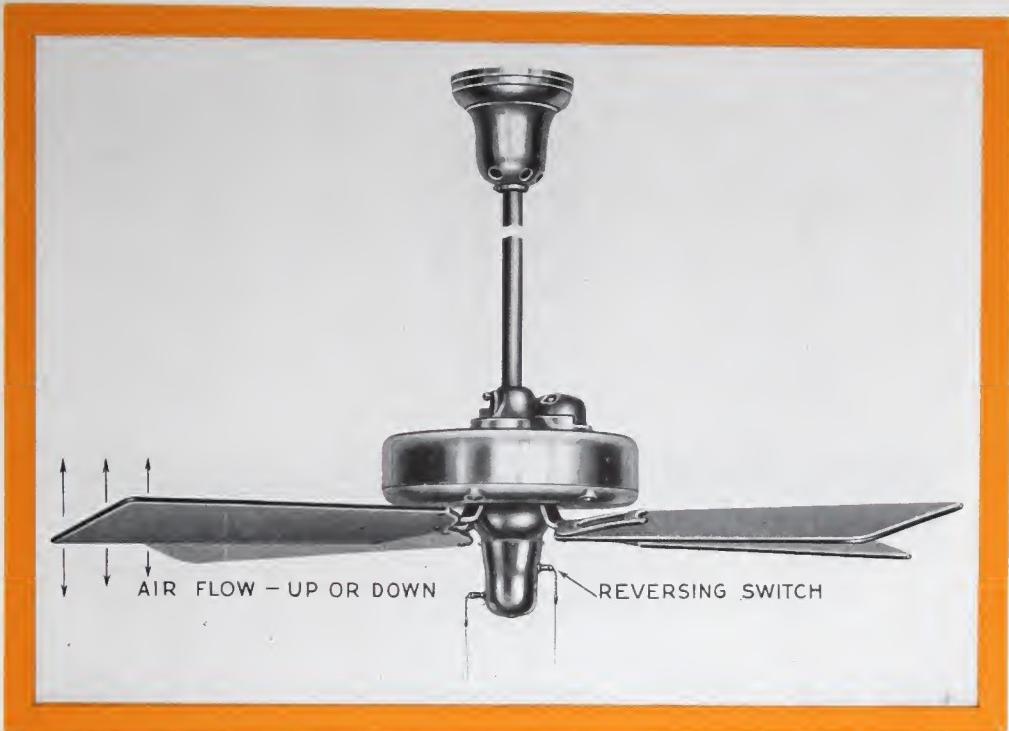
Extreme flexibility is an important advantage. The speed switch and electrical reversing switch permit changing volume and direction of air flow . . . up or down . . . while fan is in operation.

A circulation of air upward is particularly desirable in banks, offices, or other places where papers are handled directly beneath the fan, or where a direct breeze is not desirable at particular times.

Detail Specifications

MOTOR:	Induction type—slow speed—quiet. Will operate satisfactorily on voltage 10% above or below rated voltage.
SHAFT:	Hollow steel shaft (36-inch fans have $\frac{5}{8}$ -inch diameter shaft.) (52-inch fans have $\frac{7}{8}$ -inch diameter shaft.)
BEARINGS:	Ball bearings with hardened steel, grooved races—ground and polished to fit the balls, submerged and run in oil bath.
LUBRICATION:	Oil, forced-feed system of lubrication by spiral oil grooves in the armature core with oil drain plug in oil cup which permits changing oil and flushing out oil reservoir without removing fan from ceiling.
SWITCHES:	Type 86641 has 2-speed pull switch and reversing pull switch in switch cover. Type 87641 has 3-speed pull switch and reversing pull switch in switch cover.
BLADES:	Seasoned basswood—each set balanced. Type 86641 has 13° dip blades. Type 87641 has 15° dip blades.
FINISH:	Mahogany-lacquer finish over motor and trimmings—blades in hand-rubbed mahogany finish to match. (For special-finish fans, furnished specially, see price list.)
FITTINGS:	Standard equipment includes ceiling canopy, ceiling hook, and insulating hanger eye; 36" fans tapped for $\frac{1}{2}$ " hanger pipe, 52" fans tapped for $\frac{3}{4}$ " pipe. Hook with adapter to fit $\frac{1}{2}$ " or $\frac{3}{8}$ " fixture stud furnished without extra charge. (No hanger pipe furnished.)
LIGHTS:	All fans wired for lights at the factory. Ends of light wires looped in switch cover for convenience in connecting to light socket at any time it might be decided to equip fans with lighting fixtures.
WIRES:	Upper ends of light and motor wires extend 36" from top of motor canopy—usually sufficient to reach outlet box in ceiling without splicing.





EMERSON 36 and 52-inch Ceiling Fans Electrically Reversible While Operating

EMERSON 5-Year Factory-to-User Guarantee

SIZE	STYLE	VOLTS	CURRENT	SPEEDS AND WATTS			*AIR DELIVERY	WEIGHT		TYPE No.	CODE WORD	LIST PRICE EACH
				340 rpm	260 rpm	72 watts		NET	PKD.			
36"	Standard	110	60 cy.				3800 CFM	33	39	86641	SODUP	\$40.00
52"	Standard	110	60 cy.	340 rpm 220 rpm 140 watts	260 rpm 175 rpm 100 watts	60 watts 2-speed only 140 rpm 85 watts	6500 CFM	58	66	87641	SOENS	50.00

* CFM—Cubic feet of air per minute—high speed.

Regularly carried in stock at St. Louis, New York, Chicago and by conveniently located wholesalers.

Fans can be furnished specially for 220 volts, 60 cycles. No fans made for voltages higher than 250 volts.

Fans can be furnished specially with leads extended for controlling reversing action from wall switch.

Performance data subject to variation of 10% plus or minus. All data subject to change.

Packed one motor and fittings in carton. Blades with flanges and ceiling canopy in separate carton.



Easily Adapted to Flush Type Lighting Fixtures

Ceiling fans are coming into more general use in homes, hotels and apartments, as they quietly move large volumes of air and thus provide a greater degree of comfort.

The cluster type of lighting fixture is better suited to the living rooms and bed rooms of homes, apartments and hotels, because of its ornamental design. There is a wide choice of fixtures that may be used with Emerson Ceiling Fans and the easy method of installation is an extra advantage.

Types 84641, 85041, 86641, 85641 and 87641 Emerson Ceiling Fans can be used with modern lighting fixtures in the manner suggested opposite. The operation of the fan and lights can be controlled either at the fan or from wall switches.



EMERSON Ceiling Fans with Fitters for Unit Glassware

EMERSON 5-Year Factory-to-User Guarantee

SIZE	STYLE	VOLTS	CURRENT	SPEEDS AND WATTS			#AIR DELIVERY	WEIGHT		TYPE No.	CODE WORD	LIST PRICE EACH		
				330 rpm	78 watts	1-speed only		NET	PKD.					
36"	With Fitter	110	60 cy.	330 rpm	78 watts	1-speed only	3630 CFM	28	33	84641-AA	SAREL	\$35.00		
56"	With Fitter	110	60 cy.	225 rpm	180 watts	140 rpm	7600 CFM	62	70	85641-AB	SOEPT	48.00		
†56"	With Fitter	115	D. C.	160 watts	125 watts	100 watts	230 rpm	185 rpm	140 rpm	7750 CFM	55	85041-AB	TENOB	56.00
REVERSIBLE TYPES—AIR FLOW UP OR DOWN														
36"	With Fitter	110	60 cy.	340 rpm	72 watts	1-speed only	3800 CFM	34	39	86641-AA	SOERV	38.00		
52"	With Fitter	110	60 cy.	220 rpm	175 watts	140 rpm	6500 CFM	60	68	87641-AB	SOFAL	51.00		
FITTERS FOR USE WITH FANS LISTED ON PAGES 18 AND 21														
4-inch Fitter for Unit Glassware with light socket and pull switch for light (all types)							2½	Part No. 8245	SKOFH	\$2.00				
6-inch Fitter for Unit Glassware with light socket and pull switch for light (all types except 85641 and 87641)							3½	Part No. 8248	SKOKM	2.00				
6-inch Fitter for Unit Glassware with light socket and pull switch for light (Types 85641 and 87641) If wanted with 1, 2 or 3-speed pull switch for operation of fan—add per switch.							3½	Part No. 8240	SKOMP	2.00				
										1.00				

* CFM—Cubic feet of air per minute—high speed.

Regularly carried in stock (except Type 85041-AB) at St. Louis, New York, Chicago and by conveniently located wholesalers.

† Not carried in stock—Furnished on special order only.

Fans can be furnished specially for 220 volts, 60 cycles. No fans made for voltages higher than 250 volts.

Performance data subject to variation of 10% plus or minus. All data subject to change.

Packed one motor and fittings in carton. Blades with flanges and ceiling canopy in separate carton.

EMERSON Ceiling Fans with Fitters

Reversible and Non-reversible Types for Unit Glassware—Popular Models for Many Kinds of Buildings.

Dual-purpose fixtures, fan and lighting unit, are much in demand. The 52-inch and 56-inch fans are made for control of motor and lights at the fan and the 36-inch fans are made for control of lights and motor from wall switch. When 52-inch and 56-inch fans are desired for operation from wall switches, they can be furnished, specially, with motor and light leads extended for connection to outlet box in

ceiling. If fans are wanted for wall-switch control of the reversing action, this should be specified, otherwise such fans will be equipped with reversing switch in light fitter.

This complete line of fans gives a wide selection from which to choose in meeting the exact requirements of the installation. The Emerson 5-Year Factory-to-User guarantee is definite assurance of operating economy.

Detail Specifications

MOTOR:

A. C. Fans—Induction type—slow speed—quiet.

D. C. Fans—Brush and Commutator type—brushes accessible for ready renewal. Will operate satisfactorily on voltages 10% above or below rated voltage.

SHAFT:

Hollow steel shaft; 36-inch fans have $\frac{5}{8}$ -inch diameter shaft, 52-inch and 56-inch fans have $\frac{7}{8}$ -inch diameter shaft.

BEARINGS:

Ball bearings with hardened-steel, grooved races—ground and polished to fit the balls, submerged and run in oil bath.

LUBRICATION:

Oil, forced-feed system of lubrication by spiral oil grooves in the armature core with oil drain plug in oil cup permitting changing of oil and flushing out oil reservoir without removing fan from ceiling.

SWITCHES:

Types 85041-AB and 85641-AB 3-speed switch and light switch in fitter. Type 87641-AB 3-speed switch, light and reversing switches in fitter. Type 86641-AA reversing switch in fitter. Type 84641-AA, no switches.

BLADES:

Seasoned Basswood—each set balanced.

Types 84641-AA and 86641-AA have 13° dip blades.

Types 85041-AB and 85641-AB have 14° dip blades.

Type 87641-AB has 15° dip blades.

FINISH:

Mahogany-lacquer finish over motor and trimmings—blades in hand-rubbed mahogany finish to match.

FITTER:

Types 84641-AA and 86641-AA for 4" glassware with light socket. Types 85041-AB, 85641-AB and 87641-AB for 6" glassware with light socket. Fitters for 4" glassware for Types 85041-AB, 85641-AB and 87641-AB can be supplied in place of fitters for 6" glassware as listed. Fitters for 6" glassware for Types 84641-AA and 86641-AA can be furnished in place of fitter for 4" glassware as listed.

WIRES:

Upper ends of light and motor wires extended 36", usually sufficient to reach outlet box in ceiling without splicing.

FITTINGS:

Standard equipment includes ceiling canopy, ceiling hook (for wood ceiling), insulating hanger eye; 36" fans tapped for $\frac{1}{2}$ " hanger pipe, 52" and 56" for $\frac{3}{4}$ " pipe. Hook with adapter to fit $\frac{1}{2}$ " or $\frac{3}{8}$ " fixture stud furnished without extra charge.



Precision in Every Stage of Production

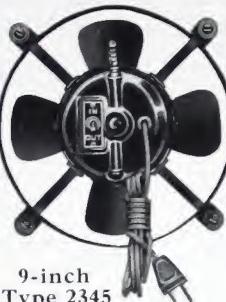
Here Emerson ceiling fans are assembled. The workman on the left is polishing the shaft before insertion of the armature. Each shaft is carefully fitted to its armature to insure quiet operation. At the right, the fitter for lighting fixture is being assembled to the fan.

EMERSON Kitchen Ventilating Equipment

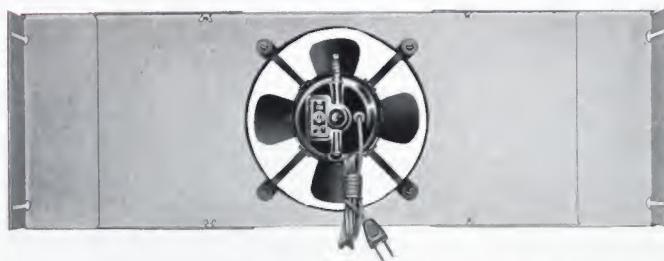
Newest, Improved, Reversible Fans with Practical Mounting Panels and Wall Boxes.



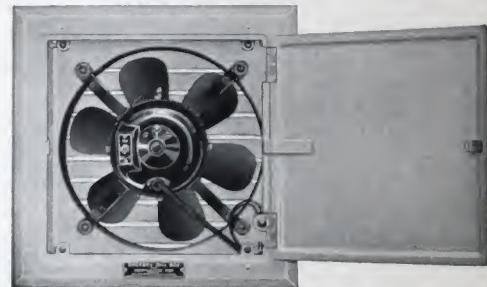
12-inch
Type 59666



9-inch Type 2345
in Adjustable Mounting Panel



12-inch
Type
59666
in
Wall Box



EMERSON VENTILATING FANS ONLY, WITH MOUNTING SUPPORTS—ONE-YEAR GUARANTEE

SIZE	VOLTS	CURRENT	SPEEDS AND WATTS	Approx. Cu. Ft. Air per Min.	Approx. Cu. Ft. Air per Hour	WEIGHT		TYPE No.	CODE WORD	LIST PRICE EACH
						NET	PKD.			
9"	110	60 cy.	1575 rpm 45 watts	600	36,000	9	12	2345	SAFOC	\$13.50
12"	110	60 cy.	1050 rpm 65 watts	1050	63,000	16	25	59666	SAGEB	22.50
16"	110	60 cy.	1600 rpm 100 watts	1650	99,000	20	27	57668	SUKAN	25.00
16"	110	25 cy.	1330 rpm 75 watts	1420	85,200	20	27	57268	SUGAZ	26.50

Fans listed for 110 volts are satisfactory for 104-115 volts. 12 and 16-inch fans can be furnished for 220 volts, 60 cycles. Blades of fans are black lacquer. Supports and motor body are finished in black. Furnished complete with plug and cord, ready for installation.

ADJUSTABLE MOUNTING PANELS FOR VENTILATING FANS

SIZE	DESCRIPTION	Pkd. Weight	CODE WORD	LIST PRICE EACH
For 9" Vent. Fan	All Metal, Adjustable to Windows, 26" to 38"	23	Panel Prices	\$3.00
For 12" Vent. Fan	All Metal, Adjustable to Windows, 27" to 37"	23	Do Not	4.00
For 12" Vent. Fan	All Metal Adjustable to Windows, 36" to 46"	30	Include Fans	7.00

Panels are drilled with all necessary holes for mounting, and are furnished complete with bolts, washers, nuts and screws.

ADJUSTABLE WALL BOXES FOR VENTILATING FANS

SIZE	DESCRIPTION	Pkd. Weight	CODE WORD	LIST PRICE EACH
For 9" Vent. Fan For 12" Vent. Fan	Adjustable to Wall Thickness 7" to 13½" Adjustable to Wall Thickness 8" to 15"	27 40	Wall Box Prices Do Not Include Fans	\$16.00 20.00

Inside panels drilled with all necessary holes for mounting and are furnished complete with screws, etc. $\frac{3}{8}$ " opening is provided in each side of box for bringing in line leads.

Insulating bushing in inside panel permits connection of fan to convenience outlet. Each box furnished with handle for opening and closing door.



EMERSON Exhaust Fans Ball Bearing, 2-Speed Motors

Emerson Exhaust Fans are a practical necessity in stores, shops, restaurants, factories, places of amusement, laundries, in fact, every type of building where a group of people may congregate to work, eat, or for recreation. They are also used extensively in the home for summer ventilation, through the attic.

1. Fully Enclosed Motor

The motor has all the latest Emerson features of design, with windings and working parts fully enclosed, to protect them from dust, grit, grease and fumes.

The motor is self-cooled. The constant stream of air passing over the motor, while it is in operation, prevents overheating, even when operated continuously on high or low speed.

Each motor is individually tested for starting torque and it is also tested for speed, watts and current input under free, full and overload conditions; also, high voltage "ground," and insulation test in conformity with the National Electrical Mfrs. Assn. standards.

2. Special Design Blades

The Emerson Exhaust Fan Blade is a new creation of Emerson Engineers. It is made of (Galvanneal) corrosion resisting steel, and specially formed for maximum operating efficiency, without sacrificing quietness. Each assembled fan has nine of these overlapping blades mounted on a large center disc, to prevent the flow of a

reverse air current back through the fan, near the hub.

An extremely durable dark green finish is applied on the blades and will withstand the elements. Frequent cleaning will not harm the finish.

3. For Horizontal or Vertical Operation

These fans may be installed in horizontal or vertical position, or at any desired angle, without injury to the motor, or the efficiency of its operation. The motor operates on special **thrust-type ball bearings**, packed with grease lubricant and sealed against leakage. Lubrication once a year is the only attention required.

4. Steel Supporting Arms and Mounting Ring

Specially formed, heavy gauge steel supporting arms are riveted to the steel mounting ring. The arms are also securely riveted to the motor clamping ring. These parts are finished in a durable black enamel. The mounting ring has four drilled holes for easy attachment.



Automatic Shutters

To automatically close the opening when the exhaust fan is located on an outside wall and not in operation, this automatic shutter will be found very satisfactory.

The louvers are made of aluminum, and each shutter is individually hung on corrosion-proof brass pins, to assure continuous service without attention.

Code-word	For Fan Size	Wt. Pds	List Price
Juron	12"	6	\$ 3.50
Juan	16"	10	7.61
Juseg	18"	12	9.00
Jush	24"	18	13.00
Jusen	30"	22	24.50

PRICES AND DATA—EXHAUST FANS—PERFORMANCE UNDER FREE AIR DELIVERY CONDITIONS

Codeword	Size Fan	Frame	H. P.	High Speed						Low Speed						Weight Net Pds	List Price
				Watts	Amps	R.P.M.	C.F.M.	C.F.H.	Watts	Amps	R.P.M.	C.F.M.	C.F.H.				
FOR 110 VOLTS, 60 CYCLES, SINGLE PHASE—230 VOLT FURNISHED AT SAME PRICES																	
LAKEL	12"	S4SM	1/50	70	1 1	1140	850	51,000	60	80	890	725	44,500	21	26	\$ 30.00	
LAKIM	16"	S5SG	1/20	135	2 5	1140	1,500	90,000	110	1 0	890	1,125	87,500	47	57	54.00	
LAKON	18"	S6ST	1/8	165	3 3	1140	2,350	141,000	105	2 0	890	1,750	105,000	55	70	76.00	
LAKUP	24"	S7SG	1/6	280	5 6	860	4,000	240,000	200	4 3	570	2,700	162,000	112	150	127.00	
LAMEN	30"	S9SD	1/3	430	8 2	685	6,700	402,000	355	8 0	570	5,600	289,000	218	263	168.00	
FOR 230 VOLTS, 60 CYCLES, THREE PHASE																	
LAPUV	18"	PRSF	1/8	175	1 0	1140	2,450	141,000	Variable speed operation obtained by use of 3-speed control with Price on application						55	70	\$1.00
LARES	24"	PTSC	1/6	230	1 6	860	4,000	240,000	Variable speed operation obtained by use of 3-speed control with Price on application						112	150	104.00
LARIT	30"	P9SF	1/3	355	2 5	685	6,700	402,000	Variable speed operation obtained by use of 3-speed control with Price on application						218	263	125.00
FOR 115 VOLTS DIRECT CURRENT, SERIES WINDING—230 VOLT FURNISHED AT SAME PRICES																	
IDNAV	12"	D4SI	1/50	40	.50	1140	850	51,000	Variable speed operation obtained by use of speed regulator in series with motor—50% reduction obtained						18	23	30.00
IDNEW	16"	D5SD	1/20	80	.70	1140	1,500	90,000	Variable speed operation obtained by use of speed regulator in series with motor—50% reduction obtained						43	53	54.00
IDNIX	18"	D6SP	1/8	127	1 1	1140	2,350	141,000	Variable speed operation obtained by use of speed regulator in series with motor—50% reduction obtained						52	67	72.00
IDNOY	24"	D8SD	1/6	242	2 1	860	4,000	240,000	Variable speed operation obtained by use of speed regulator in series with motor—50% reduction obtained						110	147	140.00
IDNUZ	30"	D11SE	1/3	392	3 4	685	6,700	402,000	Variable speed operation obtained by use of speed regulator in series with motor—50% reduction obtained						213	263	168.00

Single-phase and three-phase, 60-cycle fans, also 115 and 230 volt direct current, are regularly carried in stock at St. Louis, New York City and Chicago.

C.F.M.—Cubic feet of air per minute. C.F.H.—Cubic feet of air per hour.

Speed regulators not required or regularly furnished with three-phase or direct-current fans.

Prices and data subject to change.

EMERSON Fan Discounts Do Not Apply to These List Prices — See Special Discount Sheet



MOTORS — FANS — APPLIANCES

Leaders in the Fan and Motor Industry Since 1890